REFERENCES 83

[99] V. Singhal, A. A. Pillai, C. Saumya, M. Kulkarni, and A. Machiry, "Cornucopia: A Framework for Feedback Guided Generation of Binaries," in 37th IEEE/ACM International Conference on Automated Software Engineering, ASE 2022, Rochester, MI, USA, October 10-14, 2022, pp. 27:1– 27:13, ACM, 2022.

- [100] B. Cox and D. Evans, "N-Variant Systems: A Secretless Framework for Security through Diversity," in *Proceedings of the 15th USENIX*, 2006.
- [101] D. Bruschi, L. Cavallaro, and A. Lanzi, "Diversified Process replicate for Defeating Memory Error Exploits," in Proceedings of the 26th IEEE International Performance Computing and Communications Conference, IPCCC 2007, April 11-13, 2007, New Orleans, Louisiana, USA, pp. 434–441, IEEE Computer Society, 2007.
- [102] B. Salamat, A. Gal, T. Jackson, K. Manivannan, G. Wagner, and M. Franz, "Stopping Buffer Overflow Attacks at Run-Time: Simultaneous Multi-variant Program Execution on a Multicore Processor," tech. rep., Technical Report 07-13, School of Information and Computer Sciences, UCIrvine, 2007.
- [103] L. Davi, C. Liebchen, A. Sadeghi, K. Z. Snow, and F. Monrose, "Isomeron: Code Randomization Resilient to (Just-In-Time) Return-oriented Programming," in 22nd Annual Network and Distributed System Security Symposium, NDSS 2015, San Diego, California, USA, February 8-11, 2015, The Internet Society, 2015.
- [104] G. Agosta, A. Barenghi, G. Pelosi, and M. Scandale, "The MEET Approach: Securing Cryptographic Embedded Software Against Side Channel Attacks," *IEEE Trans. Comput. Aided Des. Integr. Circuits Syst.*, vol. 34, no. 8, pp. 1320–1333, 2015.
- [105] T. Jackson, B. Salamat, A. Homescu, K. Manivannan, G. Wagner, A. Gal, S. Brunthaler, C. Wimmer, and M. Franz, "Compiler-generated Software Diversity," in *Moving Target Defense - Creating Asymmetric Uncertainty for Cyber Threats*, vol. 54, pp. 77–98, 2011.
- [106] A. Amarilli, S. Müller, D. Naccache, D. Page, P. Rauzy, and M. Tunstall, "Can Code Polymorphism Limit Information Leakage?," in Proceedings of Information Security Theory and Practice. Security and Privacy of Mobile Devices in Wireless Communication - 5th IFIP WG 11.2 International Workshop, WISTP, vol. 6633, pp. 1–21, 2011.
- [107] A. Voulimeneas, D. Song, P. Larsen, M. Franz, and S. Volckaert, "dMVX: Secure and Efficient Multi-variant Execution in a Distributed Setting," in EuroSec '21: Proceedings of the 14th European Workshop on Systems Security, Virtual Event / Edinburgh, Scotland, UK, April 26, 2021, pp. 41–47, ACM, 2021.

84 REFERENCES

[108] R. Tsoupidi, R. C. Lozano, and B. Baudry, "Constraint-based Diversification of JOP Gadgets," J. Artif. Intell. Res., vol. 72, pp. 1471–1505, 2021.

- [109] J. Falleri, F. Morandat, X. Blanc, M. Martinez, and M. Monperrus, "Fine-grained and Accurate Source Code Differencing," in ACM/IEEE International Conference on Automated Software Engineering, ASE '14, pp. 313–324, 2014.
- [110] H. Bostani and V. Moonsamy, "EvadeDroid: A Practical Evasion Attack on Machine Learning for Black-box Android Malware Detection," CoRR, vol. abs/2110.03301, 2021.
- [111] D. D. Yao, X. Shu, L. Cheng, and S. J. Stolfo, Anomaly Detection as a Service: Challenges, Advances, and Opportunities. Synthesis Lectures on Information Security, Privacy, and Trust, Morgan & Claypool Publishers, 2017.
- [112] S. A. Hofmeyr, S. Forrest, and A. Somayaji, "Intrusion Detection Using Sequences of System Calls," J. Comput. Secur., vol. 6, no. 3, pp. 151–180, 1998.
- [113] Y. Fang, C. Huang, L. Liu, and M. Xue, "Research on Malicious JavaScript Detection Technology Based on LSTM," *IEEE Access*, vol. 6, pp. 59118–59125, 2018.
- [114] E. Johnson, D. Thien, Y. Alhessi, S. Narayan, F. Brown, S. Lerner, T. McMullen, S. Savage, and D. Stefan, ", : SFI safety for native-compiled Wasm," Network and Distributed Systems Security (NDSS) Symposium, 2021.
- [115] F. Cohen, "Computer Viruses," in *Proceedings of the 7th DoD/NBS Computer Security Conference 1984*, pp. 240–263, 1986.
- [116] R. L. Castro, C. Schmitt, and G. D. Rodosek, "ARMED: How Automatic Malware Modifications Can Evade Static Detection?," in 2019 5th International Conference on Information Management (ICIM), pp. 20–27, 2019.
- [117] R. L. Castro, C. Schmitt, and G. Dreo, "AIMED: Evolving Malware with Genetic Programming to Evade Detection," in 18th IEEE International Conference On Trust, Security And Privacy In Computing And Communications / 13th IEEE International Conference On Big Data Science And Engineering, TrustCom/BigDataSE 2019, Rotorua, New Zealand, August 5-8, 2019, pp. 240–247, IEEE, 2019.
- [118] H. Aghakhani, F. Gritti, F. Mecca, M. Lindorfer, S. Ortolani, D. Balzarotti, G. Vigna, and C. Kruegel, "When Malware is Packin' Heat; Limits of Machine Learning Classifiers Based on Static Analysis Features," in 27th Annual Network and Distributed System Security Symposium, NDSS 2020,